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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/805,291	03/22/2004	Koji Kanazawa	04329.3288	8979
22852	7590	05/04/2007		
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			EXAMINER MEDE, ESTEVE	
			ART UNIT	PAPER NUMBER
			2109	
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			05/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/805,291

Applicant(s)

KANAZAWA ET AL.

Examiner

Esteve Mede

Art Unit

2109

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>9/29/2004 & 03/22/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase "a unit which records the authentication data generated by the generation unit on a portable recording medium; a recording unit which records the authentication data recorded on the recording medium" cannot be ascertained, because it is unclear as to what is the difference between "a unit which records the authentication data generated by the generation unit on a portable recording medium" and "a recording unit which records the authentication data read out by the unit" and."

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 1, 9-19** are rejected under 35 U.S.C. 102(b) as being unpatentable by Nishino et al. (US 5,857,024).

Claim 1, Nishino discloses a unit, which reads out authentication data recorded on a portable recording medium by another device (the prior art discloses a terminal

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device which reads out authentication data from the recording medium and the prior art discloses a portable microcomputer as the portable medium (col. 1, lines 17-19; col. 4, lines 50-53)); a recording unit which records the authentication data read out by the unit (the limitation of a recording unit which records the authentication data read out by the unit is implicitly disclosed by the prior art, as the card needs a mechanism to transport data to and from it, in addition the card is a dumb device which has no use without a recording unit to add data into it); an authentication unit which performs mutual authentication processing between the authentication unit and the another device by using the authentication data recorded in the recording unit (col. 3, lines 5-9).

Claim 2 and 4, Nishino discloses the computer wherein the recording unit records the authentication data on a nonvolatile recording medium (col. 4, lines 21-22).

Claim 3, Nishino discloses a computer comprising; a generation unit, which generates authentication data (col. 1, lines 17-19; col. 2, lines 50-64); a unit, which records the authentication data generated by the generation unit on a portable recording medium (col. 1, lines 17-19); a recording unit which records the authentication data recorded on the recording medium (the limitation of a recording unit which records the authentication data read out by the unit is implicitly disclosed by the prior art, as the card needs a mechanism to transport data to and from it, in addition the card is a dumb device which has no use without a recording unit to add data into it (col. 2, lines 50-64; col. 8, lines 14-15)); recording unit to record authentication data into card is an intrinsic property of the invention, as the authentication card (token) is not able to create or record program on its own).

Claims 9-14 and 19, Nishino discloses: The computer according to claim 1, wherein the authentication unit comprises: a first reception unit which receives an authentication request from the another device; and a first transmission unit which transmits data generated using the authentication data to the another device in response to the authentication request received by the first reception unit. The computer according to claim 3, wherein the authentication unit comprises: a second transmission unit, which transmits an authentication request to the another device; a second reception unit which receives data transmitted from the another device in accordance with the authentication request transmitted by the second transmission unit; and a determination unit which determines whether the data received by the second reception unit has been generated using the authentication data. The computer according to claim 1, wherein the authentication unit comprises: a third transmission unit which transmits data generated using the authentication data to the another device; a third reception unit which receives data transmitted from the another device; and a determination unit which determines whether the data received by the third reception unit has been generated using the authentication data. The computer according to claim 3, wherein the authentication unit comprises: a third transmission unit which transmits data generated using the authentication data to the another device; a third reception unit which receives data transmitted from the another device; and a determination unit which determines whether the data received by the third reception unit has been generated using the authentication data. The computer according to claim 1, wherein the portable recording medium is configured to guarantee authenticity of recorded data. The

computer according to claim 3, wherein the portable recording medium is configured to guarantee authenticity of recorded data (mutual authentication between the card and the another device is implicitly disclosed in the prior art. See para. 3; see abstract).

Claim 15, Nishino discloses the computer wherein the generation unit comprises; an acquisition unit, which acquires owner data; and an authentication data generation unit, which generates authentication data on the basis of the owner data (see abstract).

Claim 17, Nishino discloses, the computer wherein the acquisition unit comprises, an input unit which inputs the owner data; and an owner data confirmation unit which confirms authenticity of the owner data input by the input unit (see abstract).

Claim 16, Nishino discloses the computer wherein the acquisition unit acquires biometric information of an owner as the data (see abstract line 1; column 1, lines 23-31).

Claim 18, Nishino discloses a device authentication method comprising; causing a first device to generate authentication data and record the authentication data on a portable recording medium; causing a second device to read out the authentication data from the portable recording medium and performing mutual authentication processing by using the authentication data between the first and second devices (see abstract; col. 3, lines 5-10).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 5-6**, are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishino et al. (US 5,857,024) in view of Menezes et al. (Handbook of applied Cryptography, ISDN: 0-8493-8523-7; Published by 1997 by CRC Press LLC).

Claim 5-6, Nishino discloses all the limitation of claim 5 except for the computer wherein the authentication unit includes; a determination unit which determines whether current time falls within a valid period; and an invalidation unit which invalidates the authentication data when the determination unit determines that the current time does not fall within the valid period. The general concept of determining a valid time period and invalidating an authentication data is well known in the art as taught by Menezes, which discloses a timestamp to validate the timeliness and uniqueness of messages as to protect against replay attack as well as to implement time-limited access privilege and to detect for delays (page 399 section 10-13; 10-14 and 10-15).

Claims 7-8, are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishino et al. (US 5,857,024) in view of Saito (US 2003/0041241 A1).

Claims 7-8, Nishino discloses all the limitation of claim 7 except for the computer wherein the authentication unit comprises; a count storage unit, which stores an execution, count of mutual authentication processing; a determination unit, which determines whether the execution count falls within a valid count, on the basis of data presenting the valid count contained in the authentication data; and invalidation unit

which invalidates the authentication data when the determination unit determines that the execution count does not fall with the valid count. The general concept of a count storage unit which stores an execution count of mutual authentication processing; a determination to validate if a count is valid and an invalidation to invalidate an authentication data is well known in the art as illustrated by Saito, which disclosed a storage unit which stores execution count of mutual authentication data processing (col. 18, lines 21-23; lines 30-32); a determination to validate if a count is valid and an invalidation to invalidate an authentication data (col. 19, lines 25-28; lines 41-45). Therefore it would have been obvious for one of ordinary skill in the art at the time of the invention to modify Nishino to include the use of Saito in order validate authentication data as to avoid replay attack and therefore provide secure communication among the communication parties.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Esteve Mede whose telephone number is 571-270-1594. The examiner can normally be reached on Monday thru Friday, 8:30-5:00 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frantz Jules can be reached on 571-272-6681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Esteve Mede
em
April 19, 2007

FRANTZ JULES
SUPERVISORY PATENT EXAMINER

A handwritten signature in black ink, appearing to be 'Frantz Jules', written over a horizontal line. The signature is stylized with a large 'F' and a circular flourish at the end.